On a curious Hermaphrodite Frog.

71. Hippotragus equinus, Desm.

3. 505. N'dola. 3. 456. Namwala.

72. Hippotragus niger, Harris.
506. N'dola.
♂. 466; ♀. 467. Kalomo.

73. Tragelaphus scriptus subsp. J. 486, 498; 2. 499. N'dola.

74. Limnotragus spekei, Sclat.

J. 508. Kative, near Abercorn.

75. Strepsiceros strepsiceros, Pall.3. 478. N'dola subdistrict.

76. Taurotragus oryx, Pall.

3. 496, 497.	N't	lola.
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- 2. 449. Mwana Stream, N'dola subdistrict.
- J. 455. Namwala.

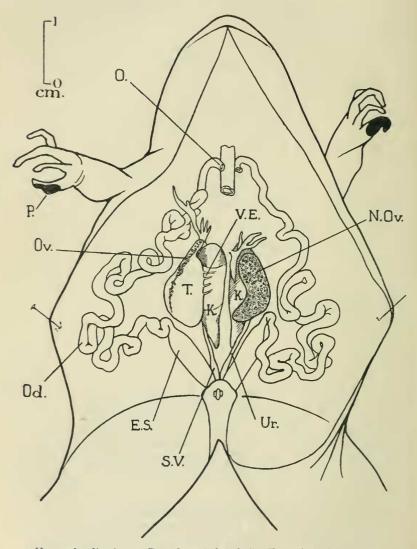
VII.—A curious Case of a Hermaphrodite Frog. By W. HAROLD LEIGH-SHARPE, M.Sc. (Lond.).

HERMAPHRODITISM in frogs is not uncommon, but that which came under my notice during the first week in March 1922 from the London area, and is preserved in the biological museum at St. Mary's Medical School, Paddington, is of special interest.

On the left side is a normal ovary—small, since it contains only the eggs that would have been laid next year.

On the right side is a misshapen but fairly large testis, capped at the anterior end by a minute ovary, containing ova to be laid the following season, the testis also bearing all along its outer border a small line of eggs. The usual vasa efferentia are present connecting the testis with the kidney.

Both oviduets are fully developed and their internal



Hermaphrodite frog. P., pads on "thumbs"; T., testis; N.Ov., normal ovary; E.S., egg-sacs; K., kidney; Od., oviduct; O., internal opening of oviduct from celom; Ur., ureter; S.V., seminal vesicle; V.E., vasa efferentia; Ov., ova along the edge of the testis.

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openings from the coeloin are open. The egg-sacs are pigmented, but the testis is not.

The mesonephric duct of the left side appears to function as a ureter, while that on the right has its distal end slightly dilated, suggesting the presence of a rudimentary seminal vesicle.

The horny opidermal pads are strongly developed on both "thumbs," and densely black.

The eggs of the present season have been laid and fertilized, and during the amplexus this animal conducted as a female. I am unable to state whether in any previous or subsequent amplexus it had or could conduct as a male, but from the structural evidence it seems not impossible—nor even unlikely.

The chief point of interest is that though a testis is present on one side only, the pads on the "thumbs" (male, secondary sexual characters) are developed on both—a case in nature parallel with Sir R. Owen's classical experiment.

## VIII.—Diagnoses of new Species of Non-marine Mollusca from Portuguese South-east Africa. By M. CONNOLLY.

FULLER particulars and illustrations of the shells described below will be given in a more important treatise in the Transactions of a learned Society, before which it was read two years ago. However, the exorbitant cost of printing, which has so seriously affected scientific publication throughout the British Empire—although, judging from beautiful works recently received, it has not been allowed to influence the output in other countries—has delayed further progress towards its appearance; and, as some of these new species have been distributed for several years under their mannscript names, it seems advisable to publish them provisionally in this little paper, pending the production of the larger volume.

## Gonaxis cressyi, sp. n.

Shell very small, oval, narrowly rimate, smooth, thin, glossy, transparent, pale olivaceous. Spire short, with parallel sides, axis almost straight, slightly bent backward at the bluntly pointed apex, which is only just visible from the front. Whorls 6, moderately convex, rapidly increasing,

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